

REMARKS

The Applicant appreciates the courteous and complete examination of the application by the Examiner. In view of the foregoing amendments and the following remarks, reconsideration of the application is respectfully requested.

In order to expedite the prosecution of this application, claim 1 has been amended. Basis for the amendment to claim 1 is provided in the specification of the present application as filed. No new matter has been added. Claims 1-28 are now pending in this application.

Claim Rejections – 35 USC § 101

In paragraph 11 of the Office Action, claims 1-22 were rejected by the Examiner under 35 USC § 101, because the Examiner was of the opinion that the claimed invention was directed to non-statutory subject matter because the claims are not tied to a statutory category (such as an apparatus) that accomplishes the method step nor do the claims transform the underlying subject matter (such as an article or material) to a different state or thing. The Examiner asserts that the claimed subject matter can be performed as mental steps by a person using paper and pencil rather than being inherently performed by an apparatus.

The Examiner has kindly suggested adding the phrase “with a processor” before the most significant step of claim 1, to address the non-statutory subject matter objection. Accordingly, claim 1 has been amended to recite “...with a processor forming on a polygonal basic tile shape a layout of a basic precinct unit comprising an array of occupiable spaces of predetermined shape, at least one access way communicating with each occupiable space...”. Since claim 1 satisfies the § 101 statutory subject matter requirements, so too do claims 2-22 because of their dependency on claim 1. Thus, the rejection under § 101 is rendered moot.

Claim Rejections – 35 USC § 102

In paragraph 14 on page 8 of the Office Action, claims 23-28 were rejected under 35 USC 102(b) as being anticipated by Showen (US Publication No. 2002/0108346 A1). The rejection is respectfully traversed.

Respectfully, the aforementioned rejection under 35 USC 102(b) is unsustainable because Showen does not disclose, teach or suggest the features in independent claim 23. This will be further elucidated below.

The “inter-tile unit” should not be mistaken for a large or long building divided into separate houses or shops, or a number of houses or shops built in contact with each other so as to form one building or a row of houses or shops. Rather, the term “inter-tile” refers to “interconnected sub-tiles” from adjacent “precinct units”. The “precinct unit” would correspond to the “neighbourhood tile”, whereas the sub-tile refers to the portion of the “precinct unit” taken up by each house. It is when two or more sub-tiles from adjacent “precinct units” combine to form a single block that an inter-tile is formed. As illustrated in Fig 15 of the present invention, the inter-tile is not just any block, it must have units facing different “precinct units” as per 14a, 14b and 14c in Fig 15.

Showen discloses a system or method of subdividing real estate consisting of a series of development circles connected together via alternating one-way streets such that, in the United States, traffic proceeds clockwise around the development circles and counter-clockwise around the traffic circles. Each development circle only has four homes, wherein each home faces 90 degrees away from the home on either side of it and has yard setbacks which increase toward the front of the home to provide more space and openness between homes.

The basic circular tile shape formed by the development circle of Showen comprises an array of occupiable spaces and at least one access way communicating with each occupiable space. The basic tile shape comprises four quadrants, each quadrant providing an occupiable space, as illustrated in Fig. 1. Each of these blocks can contain four or more detached or linked housing units within the development circle. The buildings in the centre vertical row of Fig. 1 show a single detached style construction and the three buildings in the left and the right rows of Fig. 1 show an attached style of construction.

In paragraph 5 of page 4, the Examiner asserts that the circular configuration of the basic tile shape of Showen does enable the inter-tile unit to be formed from adjacent basic precinct units to maximise the occupiable space with a subdivision, as illustrated in Fig. 1 and described in paragraph [0034].

The Applicant respectfully submits that the present invention as claimed is distinctly different from the invention taught by Showen. Paragraph [0034] in Showen describes that the same-sized development circle (basic precinct unit) for four detached single-family homes would accommodate eight, or in some cases even sixteen, multiple-family attached homes thus, maximising the occupiable space within a subdivision. However, there is no disclosure of adjacent basic precinct units being linked to form an inter-tile unit. Rather, the circular subdivision of Showen creates blocks that are defined by streets that surround the group of houses and circular sub-divisions. The units in adjacent circular subdivision are divided by the streets which surround the circular sub-divisions and therefore it is not possible for units in adjacent circular subdivisions to link to form an “inter-tile”.

Furthermore, the positioning and orientation of the houses and lot dimensions in Showen are such that there is a feeling of openness and spaciousness (paragraphs [0041] – [0042]). Thus, it is clear that the circular subdivisions of Showen are not concerned with maximising the amount of space within a subdivision.

In view of the foregoing arguments, it is respectfully submitted that claims 23-28 are new and the Examiner's rejection under 35 USC 102(b) in paragraph 14 on page 8 of the Office Action has been traversed.

Claim Rejections – 35 USC § 103

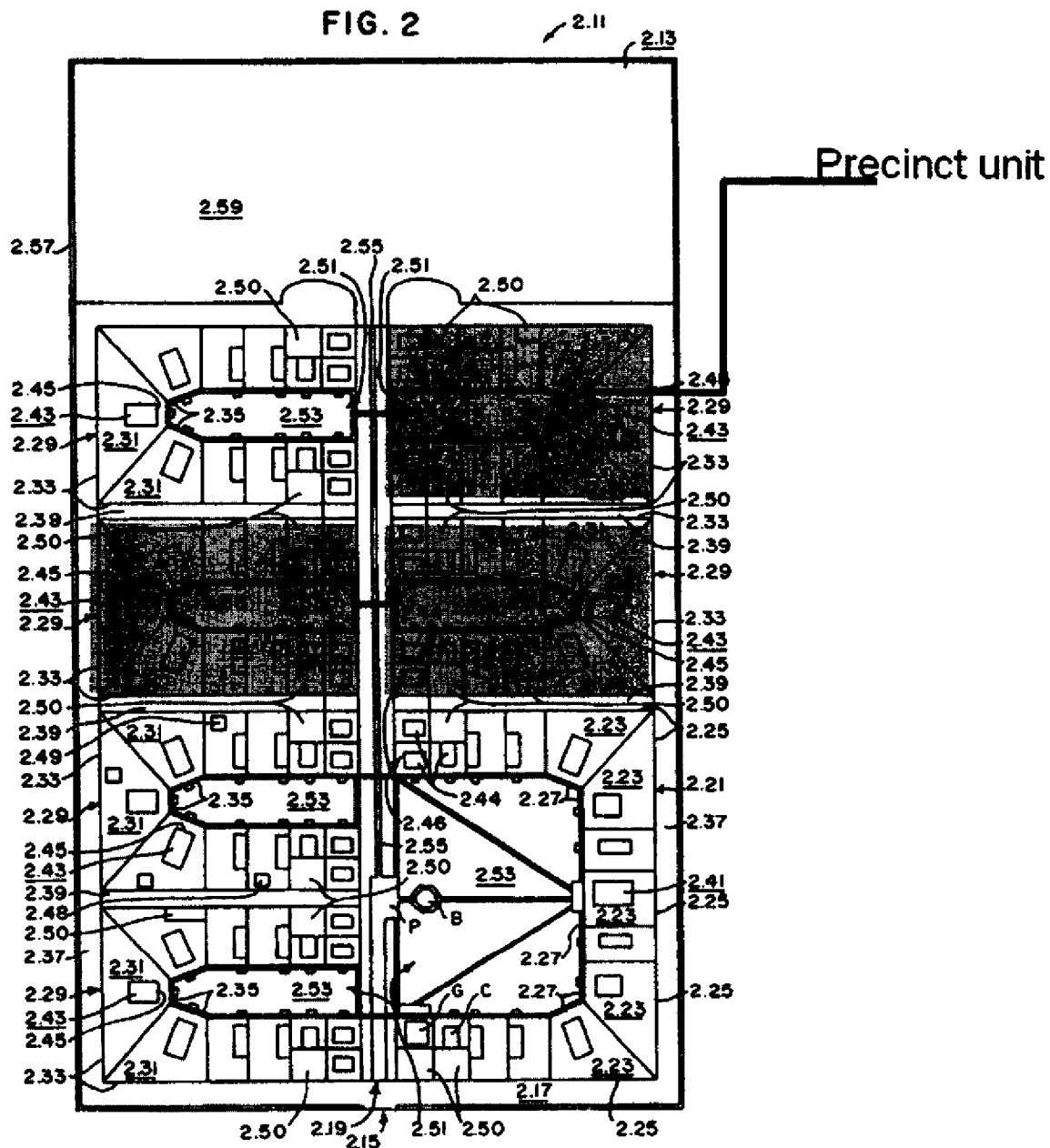
In paragraph 22 on page 10 of the Office Action, claims 1-22 were rejected under 35 USC 103(a) as being unpatentable over Flanders (US Patent No. 6688,052) in view of Adams (US 4,679,363). The rejection is respectfully traversed.

The Examiner states that Flanders teaches “...*forming on a polygonal basic tiles shape a layout of a basic precinct unit comprising an array of occupiable spaces of predetermined shape, at least one access way communicating with each occupiable space...*”. The Examiner also states that Adams teaches “*forming an optimized sub-division of said plot of land by tessellating two or more said polygonal basic tile shapes over an area to be sub-divided whereby respective said at least one access way of each basic precinct unit connects with an access way of an adjacent basic precinct unit to form a network of connecting access ways, each said basic precinct unit, together with an adjacent basic precinct unit forming an inter-tile unit of predetermined shape from two or more adjacent occupiable spaces, said inter-tile unit linking adjacent basic precinct units to form a commercial or residential sub-division*”. The Examiner asserts that it would have been obvious to a person of ordinary skill in the art to combine the methods of forming an

optimized sub-division shown in Adams with Flanders for the benefit of providing a land arrangement which preserves the environment and provided for large amounts of green space.

Flanders discloses a neighbourhood housing arrangement comprising a perimeter road encircling the neighbourhood and blocks of residence having a u-shaped configuration placed so that the opening of the u-shape faces away from the perimeter road and having a plurality of resident buildings. It is acknowledged that the invention disclosed in Flanders does recognise the advantages of the cul-de-sac layout, i.e. of having small neighbourhoods, each enjoying a clear sense of boundary, centre and entrance.

While Flanders describes precinct units, Flanders does not teach forming an optimised sub-division of a plot of land by tessellating two or more said polygonal basic tile shapes over an area to be subdivided whereby respective said at least one access way of basic precinct unit connects with an access way of an adjacent basic precinct unit to form a network of connecting access ways, each said basic precinct unit, together with an adjacent basic precinct unit forming an inter-tile unit of predetermined shape from two or more adjacent occupiable spaces, said inter-tile unit linking adjacent basic precinct units to form a commercial or resident sub-division. The layout of Flanders as shown in Fig. 2 and reproduced below indicating the precinct units, does not enable the possibility of houses in one “precinct unit” linking up with units in an adjacent “precinct unit” to form inter-tile units.



It can be seen in Figure 2 of the Flanders patent above, that each precinct unit is separated from the next one by a back lane (denoted as 2.39). This precludes the possibility of producing “inter-tile” units that have the effect of increasing the number of housing units that can be squeezed into the land to be developed.

Adams discloses a township land arrangement in a circular configuration having a plurality of concentric circular roadways intersected by a plurality of radially extending roadways. Substantially curved land areas are positioned between these roadways in a spaced apart relationship. Adams describes a specific type of linear layout whereby houses are placed inside a grid of concentric and radial streets. Such a layout grid produces segments of the city or blocks that can be composed of houses. These blocks (28 in the figure above) should not be misconstrued as “precinct units”; Adams did not address the issue of how to produce small neighbourhoods that can better encourage a sense of community.

The Adams block (28) is similar to the conventional curved block (105) described in Fig. 6 of the present application. This is not the same as a “basic precinct unit” typified by Tile 1 in Fig 9 of the present application. The houses in Figure 9 of the present application are surrounded by a courtyard which forms a small neighbourhood with a clear sense of boundary, centre and entrance. It is clear that the houses in the Adams block do not share any of these characteristics.

While Adams discloses “...*forming an optimized sub-division of said plot of land by tessellating two or more said polygonal basic tile shapes over an area to be sub-divided whereby respective said at least one access way of each basic precinct unit connects with an access way of an adjacent basic precinct unit to form a network of connecting access ways...*”, Adams does not teach or suggest “*each said basic precinct unit, together with an adjacent basic precinct unit forming an inter-tile unit of predetermined shape from two or more adjacent occupiable spaces, said inter-tile unit linking adjacent basic precinct units to form a commercial or residential sub-division*”. Rather, each basic precinct unit in Adams is separated from an adjacent unit by a circular roadway instead of being linked to form an inter-tile unit, as required by claim 1.

The Examiner makes reference to Fig. 1, 28 and column 3, lines 7-10 and asserts that each basic precinct unit in Adams is linked to form an inter-tile unit. The Examiner states that the segment area 28 has housing units on upper and lower edges (basic precinct units) and these are not separated by a circular roadway).

The Applicant respectfully submits in Adams the segment area 28 defines a plurality of curved land areas 30 which are bounded by housing units on the upper and lower edges. The segment area 28 is surrounded by a circular roadway as indicated by the arrows between the units on the upper and lower edges of adjacent segment areas. The units on the upper and lower edges of adjacent segment areas do not abut each other and therefore, adjacent segment areas 28 cannot be linked to form an inter-tile.

It is respectfully submitted that none of the prior art documents, when considered alone or in combination with one another, teach or suggest a method for sub-division of a plot of land comprising the step of tessellating the polygonal basic tile shapes over an area to be subdivided such that each said basic precinct unit, together with an adjacent basic precinct unit forms an inter-tile unit of predetermined shape from two or more adjacent occupiable spaces, wherein the inter-tile unit links adjacent basic precinct units, as required by independent claim 1.

In the event that a person of ordinary skill in the art combined Adams and Flanders, they would not arrive at the method for sub-division of a plot of land claimed in claims 1-22. These claims would not therefore have been obvious to a person of ordinary skill in the art. The prior art does not seek to address the problem solved by the present invention as discussed in the background of the specification of the present application. Therefore, it would not be obvious to a person of ordinary skill in the art to derive the present invention from the teachings of Adams and Flanders.

It is possible to test the obviousness of the present invention with reference to the Graham factors. Firstly, it is necessary to look at the scope and content of the prior art. It is clear that the prior art fails to teach or suggest a method for sub-division of a plot of land, as recited in amended independent claims 1 and 23 respectively.

The second Graham factor requires resolution of ordinary skill in the art. It is acknowledged that the person of ordinary skill in the art would be capable of understanding the prior art, applying known techniques and common general knowledge to produce a known device, substituting elements to achieve a better result, and being led by a teaching, suggestion or motivation in the prior art to combine elements of the prior art. However, the person of ordinary skill in the pertinent art would not be capable of making the inventive step required derive a method for sub-division of a plot of land comprising the step of *“forming an optimized sub-division of said plot of land by tessellating two or more said polygonal basic tile shapes over an area to be sub-divided whereby respective said at least one access way of each basic precinct unit connects with an access way of an adjacent basic precinct unit to form a network of connecting access ways, each said basic precinct unit, together with an adjacent basic precinct unit forming an inter-tile unit of predetermined shape from two or more adjacent occupiable spaces, said inter-tile unit linking adjacent basic precinct units to form a commercial or residential sub-division”*, as claimed. Further, there is no teaching, suggestion or motivation in the prior art to make this inventive step. It is clear the invention defined by the amended independent claims is novel and inventive.

The third Graham factor requires ascertainment of the differences between the claimed invention and the prior art. It is clear that the invention defined by amended independent claims

1 and 23 differs from the teachings of the prior art by requiring an inter-tile unit to be formed from two or more adjacent occupiable spaces between adjacent basic precinct units. The present invention further requires the inter-tile unit linking the adjacent basic precinct units to form a commercial or residential sub-division.

In providing objective evidence of non-obviousness with respect to the fourth Graham factor, the invention defined by the amended independent claims has the significant advantage of providing a method for sub-division of a plot of land which maximises the occupiable space within a parcel of land. These advantages could not have been predicted by a skilled person based on the teachings of the prior art and the common general knowledge.

In view of the foregoing arguments, it is respectfully submitted amended independent claims 1 and 23 and their respective dependent claims are new and non-obvious. In particular, claims 1-22 are new and non-obvious and the Examiner's rejection under 35 USC 103(a) in paragraph 22 on page 10 of the Office Action has been traversed.

In paragraph 10 on page 6 of the Office Action, claim 22 is objected to under 37 CFR 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. The rejection is respectfully traversed.

Claim 22 is directed to a land sub-division whenever effected according to claim 1, whereas Claim 1 is directed to a method of land sub-division. Claim 22 is directed to the sub-division produced from the method of Claim 1 rather than, the method of sub-dividing the land to produce the sub-division.

The invention is new and unobvious. New and unobvious features of the invention are specifically set forth in the claims. The claims are patentable under 35 U.S.C. 102 and 103.

The claims are acceptable in form under 35 U.S.C. 101 and 112.

CONCLUSION

Reconsideration and allowance are respectfully requested.

Respectfully,

James C. Wray, Reg. No. 22,693
1493 Chain Bridge Road, Suite 300
McLean, Virginia 22101
Tel: (703) 442-4800
Fax: (703) 448-7397

February 28, 2011